

CLAIMS

1. Underwater spear gun wherein the shaft is propelled along the entire length of the barrel, including propelling and tensioning rubber bands as well as sheaves, characterized in that the pulleys that allow the rubber bands to pass from the top of the barrel to its underside are located at the head of the gun and are either fixed or mobile.

2. Spear gun according to claim 1, characterized in that the pulleys are mounted in series for two rubber bands (Fig. 5).

3. Spear gun according to claim 1, characterized in that the pulleys are mounted in parallel for two rubber bands (Fig. 6).

4. Spear gun according to claim 1, characterized in that the pulleys are mounted in parallel series for three rubber bands (Fig. 7).

5. Spear gun according to claim 1, characterized in that the pulleys are faired to allow the released wire to glide through the entire system without any risk of catching.

6. Spear gun according to claim 1, characterized in that it includes a set of mobile pulleys (plate 6/10) wherein an additional band loaded on the underside actuates the pulleys by means of a lever arm.

7. Spear gun according to claim 1, characterized in that the pulleys slide inside a slot (plate 7/10) and can be pushed or pulled.

8. Spear gun according to claim 7, characterized by a slide-pushing command (plate 8/10).

9. Spear gun according to claim 7, characterized by a sliding pulley-frame command (plate 9/10).

10. Spear gun according to claim 7, characterized by a slide-pulling command (plate 10/10).

11. Spear gun according to claim 1, characterized in that the propelling rubber bands are joined by a fitting or tied to the tensioning bands (plate 3/10; Fig. 3). The number of rubbers and their cross-sections depends on the strength of each individual and on the power desired for propelling a shaft of a given caliber. Although for a defined elastic diameter, it is possible to load two tensioning bands for one propelling band, for purposes of

the strength and longevity of the rubber, a cross-sectional ratio between the propelling band and the number of tensioning bands is used.

12. Spear gun according to claim 1, characterized in that the rubber bands can be stopped during their stroke in order to reduce the power.

13. Spear gun according to claim 1, characterized in that the technology described can be applied to a crossbow for use on land.

14. Spear gun according to claim 1, characterized in that the propelling and tensioning bands can be divided in the middle into two separate branches joined to one another by connecting wires, thus having a connecting wire at each end.